

## CLAIMS

What is claimed is:

1. A computer operable method for correlating call data records in a telephone system, comprising the steps of:
  - selecting a first and second call records, providing the call records comprise call characteristic information created in the telephone system and providing the call records identify same called station; and
  - establishing whether first and second call records are correlated.
2. A computer operable method as recited in claim 1, providing selected first and second call records arrive at a central data repository within a first time difference.
3. A computer operable method as recited in claim 1, providing when an originating point code of first and second call records is used to establish whether the call records are correlated, wherein the originating point code identifies an origination signaling transfer point having capability of transferring call set-up messages between two signaling path segments, the method step for establishing whether the first and second call records are correlated comprises:
  - when the originating point codes of first and second call records are different,
  - identifying first and second call records as uncorrelated;
  - otherwise,

16 identifying first and second call records as correlated.

4. A computer operable method as recited in claim 1, providing when a destination point code of first and second call records is used to establish whether the call records are correlated, wherein the destination point code identifies a destination signaling transfer point having capability of transferring call set-up messages between two signaling path segments, the method step for establishing whether the first and second call records are correlated comprises:

when the destination point codes of first and second call records are different,

identifying first and second call records as uncorrelated;

otherwise,

identifying first and second call records as correlated.

5. A computer operable method as recited in claim 1, providing first and second call data records are members of a group of call data records whose arrival at the central data repository was after a first preselected time and before a second preselected time.

6. A computer operable method as recited in claim 1, providing first and second call data records are members of a group of call data records whose called numbers have an identical value in at least one preselected digit position.

7. A computer operable method as recited in claim 1, the method steps further comprising:

when the first and second data records are identified as correlated,

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copying at least one data field from the first data record to the  
second data record.

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8. A computer operable method as recited in claim 1, the method steps  
further comprising:

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when the first and second data records are identified as correlated,

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copying at least one data field from the second data record to the  
first data record.

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9. A computer operable method as recited in claim 1, wherein the method  
step for establishing whether the first and second call records are  
correlated comprises:

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subtracting a first timestamp included with the first call record from first  
timestamp included with the second call record, wherein first timestamp  
is time of a call initiation signal;

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when the absolute value of the result of first timestamp subtraction  
method step is greater than a first preselected value,

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identifying first and second call records as uncorrelated;

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otherwise,

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identifying first and second call records as correlated; and

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when first and second call records are identified as correlated and a

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when first and second call records are identified as correlated, the identity

of a calling station included in first and second call records is used to establish correlation of first and second call records, and when the call records identify different calling stations,

identifying first and second call records as uncorrelated;

when first and second call records are identified as correlated, the charge number of the calling station included in first and second call records is used to establish correlation of first and second call records, and when the call records identify different charge numbers,

identifying first and second call records as uncorrelated; and

when first and second call records are identified as correlated, the jurisdiction of the call included in first and second call records is used to establish correlation of first and second call records, and when the call records identify different jurisdictions,

identifying first and second call records as uncorrelated.

11. A computer program storage medium readable by a computer, tangibly embodying a computer program of instructions executable by the computer to perform method steps for correlating call data records in a telephone system, the steps comprising:

selecting a first and second call records, providing the call records comprise call characteristic information created in the telephone system and providing the call records identify same called station; and

establishing whether first and second call records are correlated.

2 12. A computer program storage medium as recited in claim 11, wherein  
selected first and second call records arrive at a central data repository  
within a first time difference.

2 13. A computer program storage medium as recited in claim 11, wherein  
when an originating point code of first and second call records is used to  
establish whether the call records are correlated, wherein the originating  
4 point code identifies an origination signaling transfer point having  
capability of transferring call set-up messages between two signaling path  
6 segments, the method step for establishing whether the first and second  
call records are correlated comprising:

8  
10 when the originating point codes of first and second call records are  
different,

12 identifying first and second call records as uncorrelated;

14 otherwise,

16 identifying first and second call records as correlated.

2 14. A computer program storage medium as recited in claim 11, wherein  
when a destination point code of first and second call records is used to  
establish whether the call records are correlated, wherein the destination  
4 point code identifies a destination signaling transfer point having  
capability of transferring call set-up messages between two signaling path  
6 segments, the method step for establishing whether the first and second  
call records are correlated comprising:

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10 when the destination point codes of first and second call records are  
different,

identifying first and second call records as uncorrelated;

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otherwise,

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identifying first and second call records as correlated.

15. A computer program storage medium as recited in claim 11, wherein first  
and second call data records are members of a group of call data records  
whose arrival at the central data repository was after a first preselected  
time and before a second preselected time.

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16. A computer program storage medium as recited in claim 11, wherein first  
and second call data records are members of a group of call data records  
whose called numbers have an identical value in at least one preselected  
digit position.

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17. A computer program storage medium as recited in claim 11, the method  
steps further comprising:

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when the first and second data records are identified as correlated,

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copying at least one data field from the first data record to the  
second data record.

18. A computer program storage medium as recited in claim 11, the method  
steps further comprising:

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when the first and second data records are identified as correlated,

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copying at least one data field from the second data record to the  
first data record.

19. A computer program storage medium as recited in claim 11, the step for  
establishing whether the first and second call records are correlated  
comprising:

subtracting a first timestamp included with the first call record from first  
timestamp included with the second call record, wherein first timestamp  
is time of a call initiation signal;

when the absolute value of the result of first timestamp subtraction  
method step is greater than a first preselected value,

identifying first and second call records as uncorrelated;

otherwise,

identifying first and second call records as correlated; and

when first and second call records are identified as correlated and a  
second timestamp included with first and second call records is used to  
establish correlation of first and second call records,

subtracting the second timestamp of the first call record from the  
second timestamp of the second call record, wherein second  
timestamp is the time of a first party disconnect signal; and

when the absolute value of the result of second timestamp  
subtraction method step is greater than a second preselected  
value,

identifying first and second call records as uncorrelated.



20. A computer program storage medium as recited in claim 11, the step for establishing whether the first and second call records are correlated comprising:

when first and second call records are identified as correlated and a third timestamp included with first and second call records is used to establish correlation of first and second call records,

subtracting the third timestamp of the first call record from the third timestamp of the second call record, wherein third timestamp is the time of a call connect signal; and

when the absolute value of the result of third timestamp subtraction method step is greater than a third preselected value,

identifying first and second call records as uncorrelated;

when first and second call records are identified as correlated, the identity of a calling station included in first and second call records is used to establish correlation of first and second call records, and when the call records identify different calling stations,

identifying first and second call records as uncorrelated;

when first and second call records are identified as correlated, the charge number of the calling station included in first and second call records is used to establish correlation of first and second call records, and when the call records identify different charge numbers,

identifying first and second call records as uncorrelated; and

32 when first and second call records are identified as correlated, the  
jurisdiction of the call included in first and second call records is used to  
34 establish correlation of first and second call records, and when the call  
records identify different jurisdictions,  
36 identifying first and second call records as uncorrelated.

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